



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/551,247

12/18/2006

Jun Takada

053065

4311

38834

7590

09/02/2008

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

HOBAN, MATTHEW E

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

09/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,247	Applicant(s) TAKADA ET AL.	
	Examiner Matthew E. Hoban	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/25/2006 9/28/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 9/28/2005 and 7/25/2006 are being considered by the examiner. In the case that duplicate references were listed on the IDS, the earlier submitted IDS was considered and the reference was lined through on the later filed Statement. In the case of Nakanishi, the bibliographic data submitted with the earlier filed IDS did not match the date found for publication on the submitted document. In this situation, the later filed IDS was considered for this reference. However, in sum all references were ultimately considered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1793

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the translation of Hironao in JP2002-280207.

Hironao teaches electromagnetic wave absorption heat conducting compositions comprising both an electromagnetic wave absorption component, as well as a heat conducting component. Further binders and other minor components are included. Paragraphs 14-15 detail the components in the composition which as stated include an electromagnetic absorption, and heat conducting component among others. Specific examples of stock ferromagnetic powders useful as the electromagnetic absorption composition are given in paragraph 28. Many of these ferrites are hexagonal. Paragraph 31 then goes on to give the amount of this component used, which is from 150-1600 weight parts relative to 100 parts of the organic binder. Compositions given as useful for the thermally conductive component are given in paragraph 33, where this list includes silicon carbide. Paragraph 35 goes on to state that the conductive

Art Unit: 1793

component can be used from 10 to 2500 weight parts relative to 100 parts of the organic binder.

The ranges of components given for both of these components taken together represent an overlapping range with the range of SiC used in the instant claim. One of ordinary skill in the art would find it obvious to select from these overlapping ranges and arrive at the claimed invention. It has been held that overlapping ranges create a prima facie case of obviousness. Furthermore, to further illustrate this point one can see based on the disclosure at paragraphs 2-6 that this composition can find use in a very wide array of devices, where the amount of heat dissipation and conductive would be dictated by the application. Therefore, one of ordinary skill in the art would find it obvious to vary the ratio of the conductive and absorptive components to make compositions especially for certain applications. This clarification by Hironao makes it obvious that the range allows for design choices to be made based on the application.

Regarding Claims 4 and 5: Hironao states that $\text{Ba}_2\text{Ni}_2\text{Fe}_{12}\text{O}_{22}$ and $\text{Ba}_3\text{Co}_2\text{Fe}_{24}\text{O}_{41}$ are both useful ferrites. These ferrites are both Y or Z type ferrites (See Paragraph 28).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okano in EP 1249847 in view of Hironao in JP2002-280207.

Okano teaches methods of making hexagonal ferrite sintered bodies which are stated as being useful as electromagnetic absorbers (See Paragraph 8) The sintered bodies can contain other sintered auxiliaries such as silicon dioxide, barium carbonate, strontium carbonate, bismuth oxide and copper oxide for example (See Paragraphs 29-36). And can be made by the process shown in paragraph 94, where the composite is molded under pressure and is then sintered at a temperature from 800-960C, for a period from 1 to 20 hours. As stated other components can be contained within the body such as silicon dioxide etc, where these components could be considered sintering auxiliaries.

Okano does not teach the inclusion of from 1-5% SiC in his molded body.

However as was stated in the previous 103 rejection, Hironao teaches that these absorbers are often used in conjunction with circuits and can fail based on the heat generated by such circuits. Hironao teaches that heat conducting components should be incorporated into the absorptive structure in order to better dissipate heat (See Paragraph 1-10 Hironao). A possible heat dissipating component taught by Hironao is SiC, which is useful in from 10-2500 parts relative to the resin. Thus one would find it obvious to also include SiC in the same proportions in the invention of Okano in order to better dissipate heat from the absorptive structure. One of ordinary skill in the art would find it obvious to select from these overlapping ranges and arrive at the claimed invention. It has been held that overlapping ranges create a prima facie case of

Art Unit: 1793

obviousness. The motivation to combine these two structures is because the combination is more resilient to failure due to heat.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Hoban whose telephone number is (571) 270-3585. The examiner can normally be reached on Monday - Friday from 7:30 AM to 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jerry A Lorengo/
Supervisory Patent Examiner, Art Unit 1793

meh